



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

**Sargent Corporation  
Penobscot County  
Stillwater, Maine  
A-942-71-D-A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #3**

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., § 344 and § 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

1. Sargent Corporation (Sargent) based in Stillwater, Maine was issued Air Emission License A-942-71-A-N on June 21, 2006 permitting the operation of emission sources associated with their crushed stone and gravel facility. The license was subsequently amended on May 16, 2007 (A-942-71-B-A) and September 6, 2007 (A-942-71-C-M).
2. Sargent has requested an amendment to their license in order to add a new crusher and diesel unit to their license.

**B. Emission Equipment**

**Rock Crushers**

<u>Designation</u>	<u>Powered</u>	<u>Process Rate (tons/hour)</u>	<u>Date of Manufacture</u>	<u>Control Device</u>
#81013 Komatsu 550	Diesel #1	300	2005	Spray Nozzles
#81017 JCI K300 Cone	Diesel #4	300	2007	Spray Nozzles
#81021 Komatsu 580*	Diesel #5	300	2007	Spray Nozzles

**Diesel Units**

<u>Source ID</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Max. Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Diesel #1	2.2	16.0	diesel fuel, 0.05% sulfur
Diesel #4	3.6	26.0	diesel fuel, 0.05% sulfur
Diesel #5*	2.6	18.7	diesel fuel, 0.05% sulfur

\*Denotes new equipment.

**AUGUSTA**

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**BANGOR**

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**PORTLAND**

312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

**PRESQUE ISLE**

1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
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### C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License</u> <u>(TPY)</u>	<u>Future License</u> <u>(TPY)</u>	<u>Net Change</u> <u>(TPY)</u>	<u>Sig. Level</u>
PM	0.1	0.1	-0-	100
PM <sub>10</sub>	0.1	0.1	-0-	100
SO <sub>2</sub>	0.1	0.1	-0-	100
NO <sub>x</sub>	4.5	4.5	-0-	100
CO	1.0	1.0	-0-	100
VOC	0.4	0.4	-0-	50

This modification is determined to be a minor modification and has been processed as such.

## II. BEST PRACTICAL TREATMENT

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Rock Crushers

The #81021 Komatsu 580 rock crusher is a portable unit which was manufactured in 2007 with a rated capacity of 300 ton/hr. The #81021 Komatsu 580 rock crusher is therefore subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from the rock crushers, Sargent shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

C. Diesel #5

Diesel #5 is used to power the #81021 Komatsu 580. Diesel #5 was purchased after July 11, 2005 and manufactured after April 1, 2006. Therefore, Diesel #5 is subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

A summary of the BACT analysis for Diesel #5 is the following:

1. The total fuel use for Diesel #1, #4, and #5 combined shall not exceed 15,000 gallons per calendar year
2. Diesel #5 shall fire only diesel fuel with a maximum sulfur content not to exceed 500 ppm.
3. Beginning October 1, 2010, Diesel #5 shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm.
4. Generator #1 shall be equipped with a non-resettable hour meter.
5. PM, CO, and NO<sub>x</sub> + VOC emission limits are based on emission limits set forth in 40 CFR 60, Subpart IIII.
6. Sargent shall operate and maintain Diesel #5 in accordance with the manufacturer's written instructions. Sargent shall not change settings that are not approved in writing by the manufacturer.
7. Visible emissions from the Diesel #5 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Facility Emissions

Sargent shall be restricted to the following annual emissions, based on a calendar year:

**Total Licensed Annual Emissions for the Facility**  
(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Diesels	0.1	0.1	0.1	4.5	1.0	0.4
<b>Total TPY</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>4.5</b>	<b>1.0</b>	<b>0.4</b>

### ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-942-71-D-A subject to the conditions found in Air Emission A-942-71-A-N, in the amendments A-942-71-B-A and A-942-71-C-M, and in the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**The following shall replace Condition (16) of Air Emission Licenses A-942-71-A-N, A-942-71-B-A, and A-942-71-C-M:**

**(16) Rock Crushers**

- A. Sargent shall install and maintain spray nozzles for particulate control on Crushers #81013, #81017, and #81021 and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115 (BPT) and 06-096 CMR 101]
- B. Sargent shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]
- C. Sargent shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the rock crushers. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

The following shall replace Condition (17)(A) of Air Emission Licenses A-942-71-A-N, A-942-71-B-A, and A-942-71-C-M:

(17) Diesel Units

- A. Total fuel use for Diesel #1, Diesel #4, and Diesel #5 combined shall not exceed 15,000 gallons per calendar year of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and type of the fuel. Records of annual fuel use shall be kept on an calendar basis. [06-096 CMR 115, BPT]

The following are New Conditions:

(26) Diesel #5

- A. Diesel #5 shall fire only diesel fuel with a maximum sulfur content not to exceed 500 ppm. [40 CFR 60.4207(a)]
- B. Beginning October 1, 2010, Diesel #5 shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm. [40 CFR 60.4207(b)]
- C. Diesel #5 shall be equipped with a non-resettable hour meter. [06-096 CMR 115, BACT]
- D. Emissions shall not exceed the following [40 CFR 60.4204(b)]:

Emission Unit	PM (g/kW-hr)	NO <sub>x</sub> + VOC (g/kW-hr)	CO (g/kW-hr)
Diesel #5	0.2	4.0	3.5

- E. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> + VOC (lb/hr)	CO (lb/hr)
Diesel #5	0.12	0.12	0.13	2.31	2.03

- F. Sargent shall operate and maintain Diesel #5 in accordance with the manufacturer's written instructions. Sargent shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]

- G. Visible emissions from Diesel #5 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(27) **New Source Performance Standards for rock crushers**

- A. Crusher #81021 is subject to 40 CFR Part 60 Subparts A and OOO and Sargent shall comply with the applicable requirements of each.
- B. Sargent shall have an initial performance test performed on the Crusher #81021 per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Sargent shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7 day notice to the regional inspector.

DONE AND DATED IN AUGUSTA, MAINE THIS 15th DAY OF October 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

James P. Brooks Jr.  
DAVID P. LITTELL, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-942-71-A-N**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/8/08

Date of application acceptance: 7/14/08

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Lynn Ross, Bureau of Air Quality.

